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Social Skills Do Not Develop en Passant! The Promotion of Social Competence in Apprenticeship

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Abstract

In the context of digitalization numerous initiatives and projects have been started, most of them focus on technical competences. The question of social skills is only marginally discussed, although interaction, communication, cooperation and team skills in increasingly networked work processes are a central prerequisite. Social competence is more than an add-on and has functional relevance for apprenticeship and the development of vocational competence. Following on from first results of a research project in the funding guideline "Promotion of social competence in dual training, in particular for the integration of refugees of the Federal Ministry for Economic Affairs and Energy", the article discusses the promotion of social competence in apprenticeship. The article deals with the social skills of apprentices in the first year of apprenticeship in industrial technical training occupations, in the context of a learning project.

Keywords

social competence; apprenticeship; future of work; vocational education training

1 Introduction: The importance of social competence

Research on recruiting apprentices shows that companies have increased expectations and expectations of social skills and interpersonal relationships with young people (Protsch, Gerhards, & Mohr, 2017). This requires apprentices to make an effort that is not to be underestimated to build up previously social skills. Part of this effort can already be significantly reduced by apprenticeship if this expectation is included right from the start as an integral part of the content and methodology vocational training process. Until the 1880s, vocational education training relied mainly on craftsmanship (for example, in dealing with complex machine tools) and an understanding of existing processes (Brater, 2010). The question of social skills is, if at all, addressed only marginally so far, although interaction, communication, cooperation and team skills are an essential prerequisite for increasingly networked work-processes. In addition, the provision of social competence in apprenticeship makes a significant contribution to prevent contract solutions and increases the chances of taking over after the end of the apprenticeship. Therefore, social skills are more than only an add-on and have functional relevance for the development of occupational skills. Data from the IAB ZEW company survey on "Workplace 4.0" shows that the promotion of interdisciplinary qualifications in the context of company-based training is increasingly playing a role, especially

for companies with Workplace 4.0 investments (Janssen, Leber, Arntz, Gregory, & Zierahn, 2018; Warning & Weber, 2018). In view of increasing interdisciplinary work, structures of vocationally are losing importance in future VET in favour of an interdisciplinary approach that requires social skills. So far, we assume that, the more knowledge-intensive the work the higher the demands on social skills.

In many cases, there is a shift to social skills only in the event of disruptions and conflicts. Instead of this problem-oriented discourse, we assume that social competence functions equally as a prerequisite and as the goal of vocational learning processes. There is no universally accepted definition of social competences (Reißig, 2006). Difficulties with the construct "social competence" lie in particular in its blurring and the different theoretical and disciplinary references from the psychological, sociological or pedagogical research. While some well-established procedures exist for the collection and promotion of general social competence (Kanning, 2003, p. 31), the promotion of social competences in the vocational context is neglected. Although in the course of the reform of the Vocational Training Act (BBiG) in 2005, the vocational competence was anchored as a model of vocational training and the competence dimensions methodical, personal and social competence in itself, the social competence nests a niche in favour of investigations for modelling and measuring vocational competencies. The concept of competence is used in the project in a pedagogical understanding. According to vocational education research, we define social competences as "dispositions for purposeful interaction with other people about factual, social or personal issues in specific types of situations" (Euler & Bauer-Klebl, 2009). Based on theories of action theory and constructivism, learning social competences shape vocational competencies. According to psychological and vocational educational approaches, the construct of social competence is not understood exclusively as a personality trait, but always includes an environmental or situational reference (Euler & Bauer-Klebl, 2009; Reißig, 2006).

Based on first results of a research project in the funding guideline "Promotion of social competence in dual training, especially for the integration of refugees" - funded by the Federal Ministry for Economic Affairs and Energy - the paper discusses the promotion of social competence in apprenticeships. The paper deals with the social skills of apprentices in the first year of apprenticeship in industrial technical training occupations, in the context of a learning project. While social skills are indisputable in training occupations with interactive requirements - such as commercial occupations and nursing professions - social skills in the technical field have long been neglected.

The aim of the paper is to clarify that social competence cannot be reduced to a personal trait, which has to be "teased out" by the training staff, but rather the interaction between operational, personal and vocational aspects between the poles of assertiveness and adaptability concretized.

2 The learning project 3D-printer - methodical approach

To enhance the social competences of apprentices, the research project focusses the implementation of the learning project "Development and Construction of a 3D Printer". It is about how the apprentices work together in the learning project, plan the next steps and support each other. For the concretisation of the construct "social competence" workshops and semi-structured interviews with the apprentices were carried out. In addition, semi-structured interviews were conducted with vocational trainers to find out what expectations are made of young people. The implementation of the project was also boosted by the high relevance of vocational education training in the company. At the beginning of the new vocational training year, a multi-day workshop takes place regularly together with trainers and all new apprentices in a seminar hotel outside the company's location. A goal of this workshop is to promote the social coexistence between the apprentices and the staff.

As a heuristic model for the development of social competences, we refer to the topic-centred triangle (Euler & Bauer-Klebl, 2009) in order to make the interactions between subject, individual competencies and teamwork visible (Figure 1).

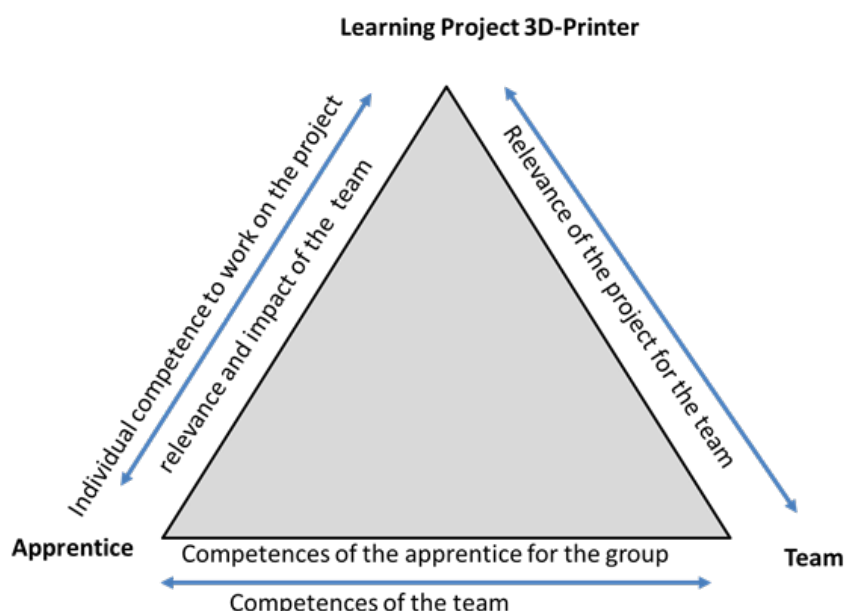


Figure 1 Heuristic Model: The topic-centered triangle

The focus lies on the action regulation (interaction partner as subject with own interests, experiences to perceive and accept values) and perspective coordination (ability to relate the different perspectives to each other). The implementation was carried out by semi-structured interviews and workshops with the apprentices and the vocational trainers. Sixteen apprentices from the first year of apprenticeship participated in the project. The age range was between 18 and 28 years. Three quarters of the apprentices had a migration background (especially Turkish background). The committed and motivated participation of the apprentices in the project also results from the fact that for two-thirds of the apprentices the apprenticeship is the desired occupation.

Building on the activity model of social competences (Runde, 2001), according to which social competence is acquired and applied not in general but in specific situations, the learning project is differentiated into 5 learning situations (Figure 2), which address technical as well as social skills. In this way, it is possible to concretize the four overarching social skills of teamwork, conflict resolution, communication skills and organizational skills and relate them to the working-process.

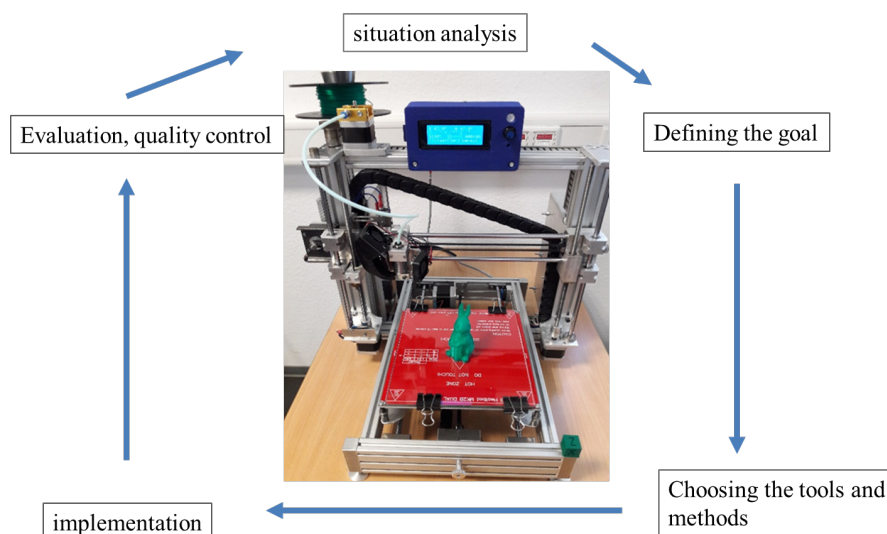


Figure 2 Model of situational social competences in the learning project 3D-Printer

The aim of the project was to promote social competencies in vocational education not only "en passant" or through unique experiential educational events, but to integrate them into the vocational educational training practice. Advantages of the learning project 3D printers are:

- occupation-typical practical and current task by building a 3D printer,
- complex task processing oriented to the complete action,
- processing the learning project is only possible through the coordination of individual competences and social interaction and communication,
- joint planning and coordination.

The apprentices get technical support in the implementation of the learning project primarily by the vocational trainees, but also states a good half of the apprentices to turn to second year or third year apprentices in case of problems and uncertainties. It clearly shows that the learning project can only be successfully mastered together and across all vocational fields, that the apprentices depend on each other to complete the learning-project successfully.

In addition to the vocational trainers, apprentices from the second and third years of apprenticeship can make a significant contribution to promoting a constructive working atmosphere as well as a learning and error culture. In many cases, contact persons for new apprentices are shaped on an informal level. In the project, these informal contacts from the second and third year of apprenticeship were explicitly designated as mentors. It is often already apparent at the informal level which apprentices from the second or third year of apprenticeship are suitable as mentors for the new apprentices. They are apprentices who are open in communication, show an interest in the operational work-processes and contexts and are characterized by helpfulness. This also means not only responding to questions which are directly addressed to them, but also hearing and seeing if a trainee needs support. For apprentices in the first year of apprenticeship, the mentors are important contact persons, because they are like-minded people in "small short questions". Through their explicit choice as mentors, the sense of responsibility for the support of the apprentices in the first year of apprenticeship increased. The mentors "help" the apprentice with "any questions". This is done not only on direct questions, but also adaptively, for example, by the mentors hearing from the sounds of the machine whether the tuning parameters are correct.

3 Challenges for the trainers in vocational education

Trainers in vocational education play a key role in providing the necessary occupational competences as well as in the socialization of apprentices. The competence profile of trainers can be derived from the four fields of action of Ordinance on Trainer Aptitude (AEVO): examining and planning training, preparing, executing and completing training, and assisting with the recruitment of apprentices. In general, these tasks can be divided into organizational and administrative tasks, didactic-methodological tasks (planning and implementation), educational tasks and socio-pedagogical tasks. In view of the changing socio-structural composition of apprentices and changed work processes, trainers are confronted with new demands and tasks. In addition to their traditional training activities, they act as moderators, learning process facilitators or coaches.

The task of the vocational trainers is to shape the occupational socialization process of the apprentices. The trainers move in the field of tension, on the one hand to prepare for the operational structure and the operational control system, on the other hand they have to be open to the interests and values of the young people (Dietrich & Harm, 2018). In view of the changing socio-structural composition of apprentices and changing work-processes, vocational trainers are confronted with new demands and tasks. In addition to their traditional training activities, they have to act as moderators, learning process facilitators or coaches.

4 Form a soloist to a teamplayer

When it comes to the question of social competence, the demand for group work is almost reflexive. The occupational socialization space requires an orientation towards others, such as colleagues and trainers, as well as the group ("not only for me, but learning for the team"), while in school by the subject orientation individual learning is in the foreground ("soloist").

The quote from an interview with an apprentice in the third year of training illustrates the challenges of the transition process and the "arrival" in the workplace:

"At school, I preferred to do things on my own, because I was also a step ahead of many scholars, and group work is always a bit difficult, because some people lag behind, they do not do that much and I was much further away. This has changed the most here in the company, because you had no choice, so you were confronted with it directly. You have to do some project together now. You do not do the projects alone, but different occupations together or you just do not know some things and you have to explain them to yourself or do it together with somebody."

Requirements for social competence become equally virulent in project work at the content and relationship level. The overwhelming majority of the surveyed apprentices confirms the fact that group work promotes the technical exchange. However, the apprentices attribute a higher meaning to the social exchange than to the technical and professional one (Figures 3 and 4).

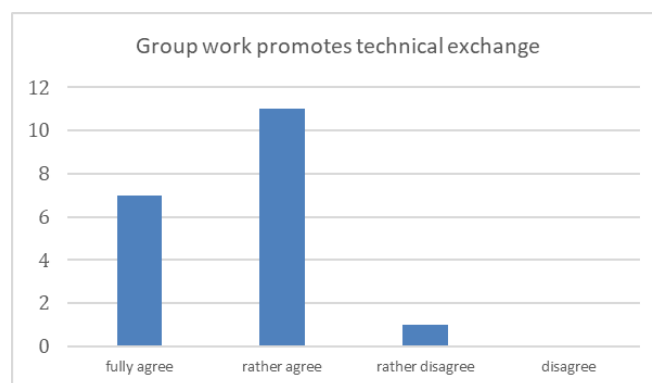


Figure 3 Group work and technical exchange

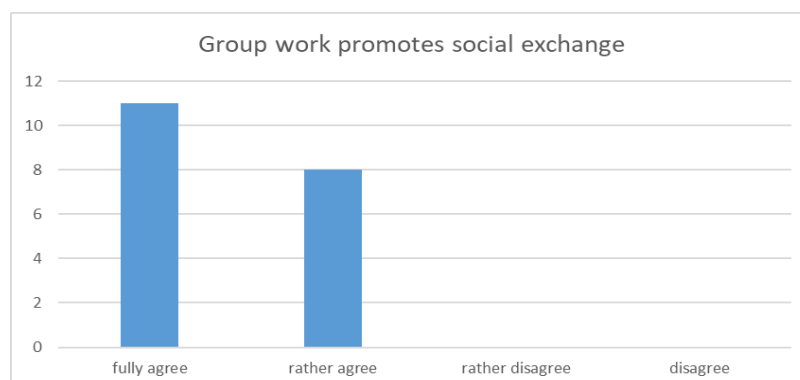


Figure 4 Group work and social exchange

Furthermore, one third of the apprentices agree that group work takes too much time, and they could do it faster on their own (Figure 5).

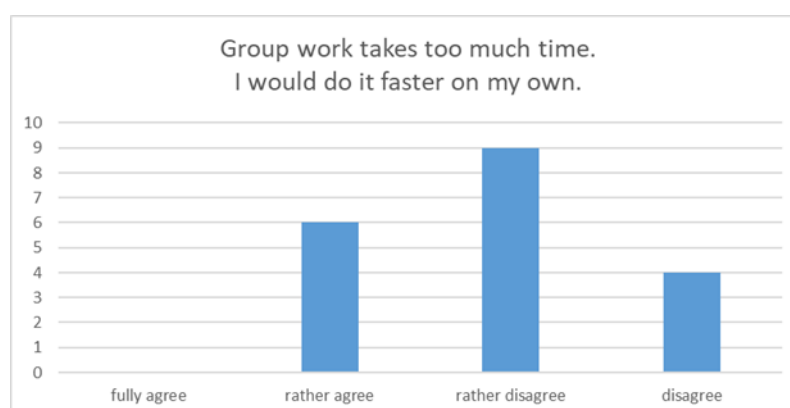


Figure 5 Group work and time

The apprentices pay close attention to whether the work in the group is equally distributed. This shows a dilemma that young people have to overcome: on the one hand, they must and want to distinguish themselves from the trainers; on the other hand, they must and should behave cooperatively.

5 Promotion of social skills through regular

Almost all apprentices asked for feedback on technical and vocational questions. One third of the apprentices also want feedback from the vocational trainers in case of problems with other employees and apprentices. Only four apprentices also want a feedback from the vocational trainers in case of private problems. In addition, the apprentices want regular feedback (Figure 6).

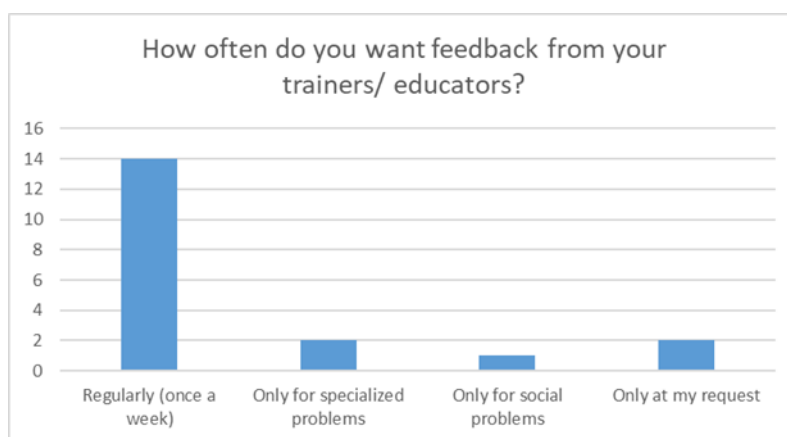


Figure 6 Regular Feedback

The desire for regular feedback from the trainees is of key importance to the apprentices in their first year of apprenticeship. The transition from school to work-based education is accompanied by uncertainties that have to be taken into account by the trainer. The apprentices want to know what they are looking for and wish to embedding their work tasks in the workplace. The apprentices are not only concerned with subject-specific feedback - for example, if a component has been processed correctly - but also with feedback on the behaviour in the workshop, the communication with the trainers and the other apprentices. Interesting in this context is that in particular the trainees who spend a longer period in the apprenticeship workshop, the care of the vocational trainers rate is higher.

The following questions sensitize for social competences without evaluating them:

- How is information obtained? (for example: independently, via third parties)
- What is the significance of the individual and the group?
- What role do rules and regulations play for the apprentices?
- What role do age and gender play in communication between apprentices and vocational trainees?

6 Conclusion

The study shows that the integration of project work in vocational training increases the sensitivity for social skills. A particular challenge lies in the communication across the different

vocational profiles. In future it will be necessary to combine vocational occupational content more closely than before with inter-occupational projects.

Three results should be emphasized: First, the study showed that for the apprentices the social exchange in group work is in the foreground and cross-occupational group work as a didactic method for dealing with complex problems plays a subordinate role, so far. This, as well as the results of the surveys that the apprentices expressed scepticism regarding a fair assessment of group work, indicate that the primacy of the subject matter as an individual competence has priority. At this point further learning projects are also desirable between the learning venues company and vocational school in order to promote the simultaneity of occupational and social competences through learning projects.

Secondly, the sceptical attitude of the apprentices towards group work. The apprentices pay close attention to whether the work in the group is equally distributed. This points to the social preconditioning of group work. Vocational trainers face the challenge of not only taking into account technical aspects of group affiliation, but also social ones.

Social competencies concretize between the poles adaptation and assertiveness. The apprentices are challenged to position themselves in the social structure in the company with their rules and hierarchies between individual profiling and social integration. Two attitudes can be distinguished: On the one hand, apprentices who try to distinguish themselves at an occupational and technical level by highlighting their vocational skills, on the other hand, apprentices who emphasize their reliability, seriousness and commitment. In this context, sometimes the various demands on the apprentices' conflict: on the one hand, self-employed personalities are sought, but at the same time, the hierarchically structured corporate social structure demands conformity and subordination rather than a self-confident appearance and individual action. The simultaneity between networked inter-occupational work processes and still existing hierarchical company structures represents a special challenge for the apprentices. On the one hand, the operational demands regarding self-responsibility and independent work increase, on the other hand, the micro-enterprise structures require "suitable" employees. Furthermore, the hierarchically structured company demands rather conformity and subordination instead of a self-confident appearance and cooperative action at eye level. Therefore, vocational trainers are challenged to act as moderators and coaches in addition to their traditional educational work, given the changing social structure of apprentices and changing values and attitudes to work.

Thirdly, in many cases, in everyday vocational training, certain apprentices are repeatedly asked as contact persons for problems and questions. Recognizing these informally acquired competences through mentoring activities arouses great interest in the apprentices. Here, the apprentices would be willing to take additional lessons on the subject of feedback methods and communication models in their spare time. The goal would be to list this mentoring activity in the work certificate.

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Biographical notes

Dr. Daniela Ahrens is Senior Researcher at the University of Bremen, Institute of Technology and Education. Her researches focus on vocational education, social inequalities, school-to-work -transition, questions of increasing academisation of the working world.